UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,856	10/24/2001	Sanjive Agarwala	TI-28982	7440

			EXAMINER
23494 7590 11/23/2004			HUYNH, KIM T

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ART UNIT	PAPER NUMBER
2112	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 September 2004</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-13</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-13</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 October 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by

Robertson et al. (US Patent 6,496,740)

As per claims 1,8, Robertson discloses a data transfer controller comprising:

- a request queue controller capable of receiving, prioritizing and

  dispatching data transfer requests each specifying a data source, a data

  destination and a data quantity to be transferred; (col.15, lines 15-20)

- a data transfer hub connected to the request queue controller for receiving

  dispatched data transfer requests; (col.15, lines 21-22)

- a plurality of ports having an interior interface connected to the data

  transfer hub which is so configured as to be the same for each port and an

  exterior interface configured for an external memory/device which, in

  operation, is connected to said port, the interior interface and the exterior

  interface being connected for data transfer therebetween; (col.15, lines

  23-30)

- wherein the data transfer hub being capable of controlling data transfers from a source port corresponding to the data source to a destination port corresponding to the data destination in quantities corresponding to the data quantities to be transferred under a currently executing data transfer request; and (col.15, lines 31-35)

- wherein at least one of said plurality of ports consists of an active data port connected to said request queue controller capable of specifying a data source, a data destination and a data quantity to be transferred. (col.11, lines 9-26), (col.12, lines 43-55)

As per claims 2, 9, Robertson discloses wherein: said active data port capable of generating a data transfer request specifying said active data port as said data destination; wherein said data transfer hub generates a read command to said data source and transfers read data to said active data port. (col.11, lines 9-26), (col.12, lines 43-55)

As per claims, 3, 10, Robertson discloses wherein: said data transfer hub generates a pre-write command to said active data port prior to transferring said read data to said active port; (col.9, lines 34-45) and said active data port generates an acknowledge signal to said data transfer hub following receipt of said pre-write command when said active data port is ready to receive data. (col.8, lines 53-67)

As per claims 4, 11, Robertson discloses wherein: said active data port capable of generating a data transfer request specifying said active data port as said data

source; wherein said data transfer hub generates a read command to said active data port and transfers read data to said data destination. (col.11, lines 9-26), (col.12, lines 43-55)

As per claim 5, Robertson discloses wherein: said interior interface of said active data port supplies a read data command to said exterior interface of said active data port in response to read data command of said data transfer hub. (col.9, line 46-col.10, line 18)

As per claims 6, 12, Robertson discloses wherein: said interior interface of said active data port includes a first-in-first-out buffer; (col.15, lines 47-60) said exterior interface writing data into said first-in-first-out buffer upon generation of said data transfer request by said active data port; (col.8, lines 22-67) and said interior interface supplying data read from said first-in-first-out buffer upon receipt of said read command from said data transfer hub. (col.8, lines 22-67)

As per claims 7, 13, Robertson discloses wherein: said interior interface of said active port generates a stall signal to said exterior interface of said active port when said first-in-first-out buffer is full; (col.14, lines 48-55) and said exterior interface refrains from writing data into said first-in-first-out buffer upon receipt of said stall signal. (col.10, lines 42-45)

Response to Amendment

3.   Applicant's amendment filed on 9/7/04 have been fully considered but does not place the application in condition for allowance.

a. In response to applicant's argument that Robinson does not teach wherein the data transfer hub being capable of controlling data transfers from a source port corresponding to the data source to a destination port corresponding to the data destination in quantities corresponding to the data quantities to be transferred under a currently executing data transfer request. Robinson includes no teaching regarding ports and no teaching that a port is connected to both the data transfer hub and the request queue manager. Examiner respectfully disagrees. As Robinson notes at (col.6, lines 10-40, Examiner further cited for clarification), discloses the transfer controller with hub and ports TCHP is interconnection network. Hub and ports tied together by a common central pipeline for all data communications. A request queue controller 300 connects to hub 310 to registers 320 which receive the data transfer request packets and processes them. Registers 320 interface with source 330(read address ports) and destination 340 (write address ports) for calculating for source and destination operations. Thus, the prior art teaches the invention as claimed and the claims do not distinguish over the prior art as applied.

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Conclusion

5.   *Any inquiry concerning this communication or earlier communications from the examiner should*

be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to

[kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9.00AM- 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark

Rinehart can be reached on (571)272-3632 or via e-mail addressed to [mark.rinehart@uspto.gov]. The

fax phone numbers for the organization where this application or proceeding is assigned are (703)872-

9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be

directed to the receptionist whose telephone number is (571)272-2100.

Kim Huynh

Nov. 17, 2004

**TIM VO
PRIMARY EXAMINER**